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MEAT & POULTRY
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PUBLIC RELATION
CURRENT SERIAL RECORDS



United States
Department of
Agriculture

Food Safety
and Inspection
Service

Meat and Poultry
Inspection
Program

June 1983

Issuances of the Meat and Poultry Inspection Program

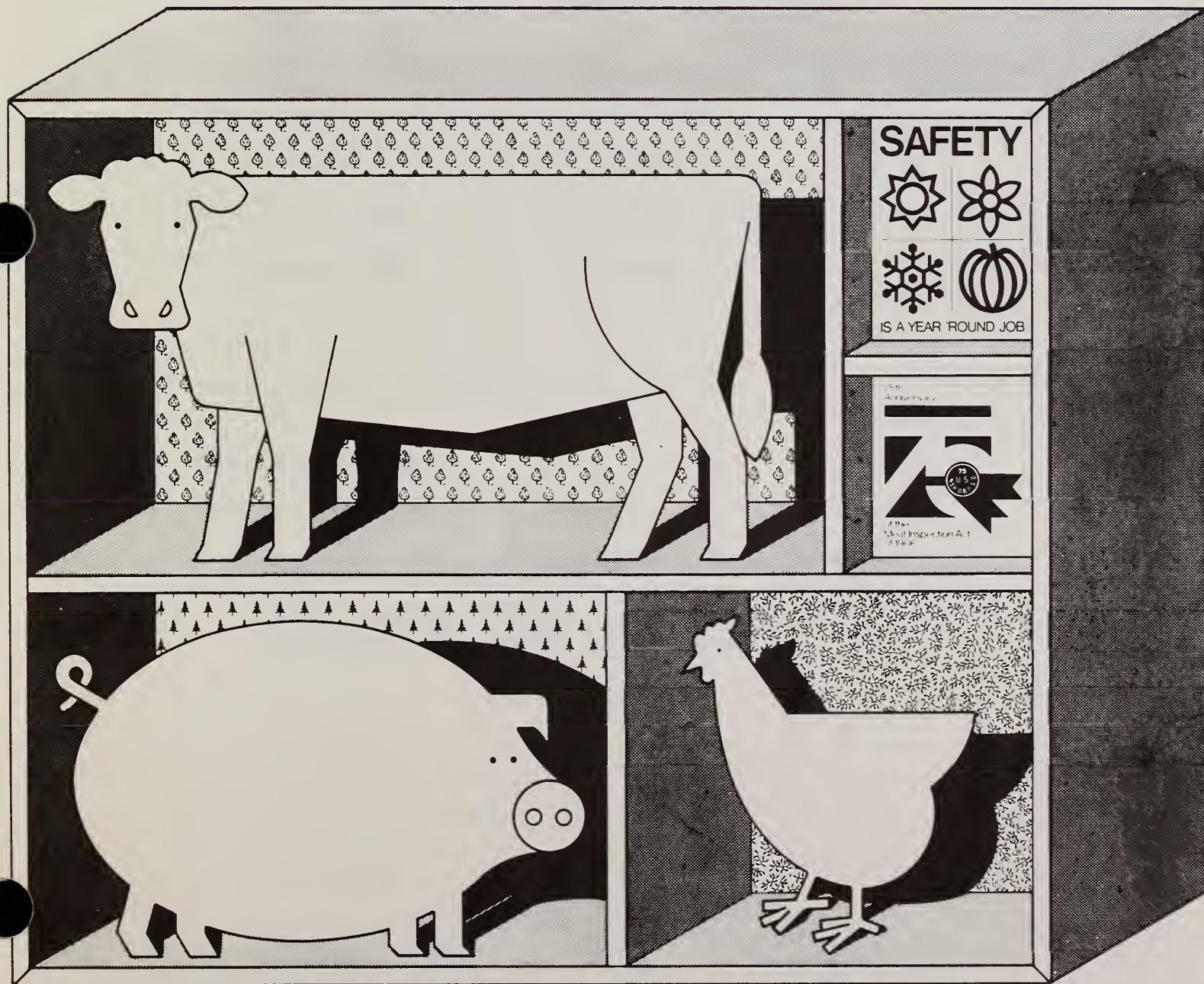


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Change 83-6 - Meat and Poultry Inspection Regulations

UNITED STATES DEPARTMENT OF AGRICULTURE
Food Safety and Inspection Service
Meat and Poultry Inspection
Washington, D.C. 20250

Meat and Poultry Inspection Manual

Date: June 1983

Change Number: 83-6

MAINTENANCE INSTRUCTIONS

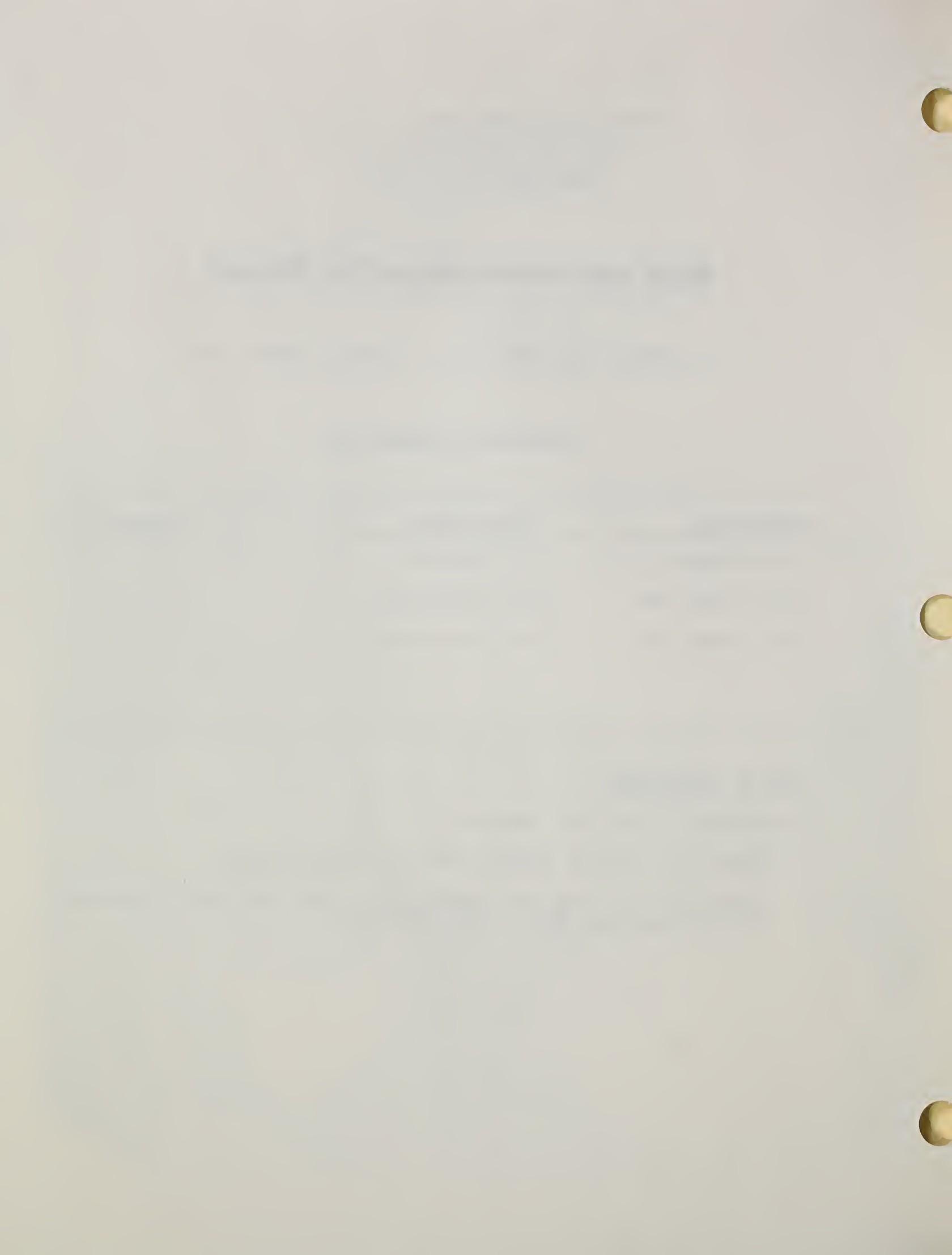
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PEN AND INK CHANGES

Corrections to the April Issuance:

Prior Label Approval Bulletin should be numbered 83-24.

Under the heading "Pen and Ink Changes": First item should be deleted;
Second item, page number should read 261o.



4. Use of bait boxes outside of processing areas where rodent activity is possible.

5. Weekly premises survey (inside and outside) to determine control effectiveness.

6. Contract with a recognized extermination firm or an effective plant program.

(b) Plant's Responsibility

Plant management shall submit or resubmit to the inspector a copy of the rodent control program, indicating actions taken or to be taken to prevent rodent problem recurrence, and shall fulfill all requirements of 8.51(a) within 5 days after deficiency is noted.

(c) Inspector's Responsibility

(1) **Inspection withholding.** The inspector shall review the plant's program to assure that corrective actions are taken, and shall send a report to the area supervisor. He shall withhold inspection, when all minimum requirements for a rodent control program are not implemented within 5 days, and shall report the action to the area supervisor.

(2) **Inspection Suspension; Reinstatement.** The area supervisor shall recommend inspection suspension when the rodent problem continues and management fails to take corrective actions.

RD shall suspend inspection when minimum rodent control requirements have not been met, or when there is evidence that the plant is unable to control rodents in production or production-related areas. He shall reinstate inspection when all requirements of this subpart have been met, as determined by a complete plant survey made under direction of Regional Office.

SPECIAL SANITATION REQUIREMENTS

Subpart 8-H

(Regs: M-308, 318; P-Subpart H, O)

Generally, bacteria grow slowly at or near freezing (32° F.), but multiply rapidly with increasing temperature; therefore, product and room temperature must be kept as low as possible.

8.54 RAW PRODUCT AREA

Midshift Cleanup

When temperature of processing areas is not maintained at or below 50° F., a midshift cleanup of equipment surfaces contacting product (trays, tables, chutes, belt conveyors, hand-tools, etc.) shall be required within 5 hours from start of operations, and at least every 5 hours thereafter.

Complex equipment (grinder, stuffers, etc.) will also be cleaned as above, unless (1) it is reused within 3 hours, and (2) product is processed (cooked, frozen, or dried) within 4 hours after its temperature rises to 50° F. If any above schedule is delayed by breakdown(s), product must be adequately refrigerated until normal processing is resumed.

Regardless of room temperature, all used equipment shall be cleaned and sanitized at least every 24 hours.

8.55 HEAT-PROCESSED PRODUCT AREA

(a) Management's Responsibility

Heat-processed products, that may be consumed with limited further processing, provide ideal media for food poisoning organisms.

Plant management is responsible for assuring acceptable sanitation standards for facilities, equipment, and

personnel to prevent product contamination and/or bacterial growth.

(b) Product Handling

Besides other requirements, this section applies to products that are heat processed at 140° F. or higher. Shelf-stable dried products and smoked pork items--dry salami, hams, bacon, etc.--are presently excluded.

Persons handling or preparing raw products shall not handle heat-processed products, unless they first wash and sanitize their hands and change garments.

Persons working with live animals, byproduct, or inedible product shall not handle heat processed product.

Management shall not allow persons with boils, open sores, other inflammatory abnormalities or dirty hands and fingernails to handle edible product.

(c) Handwashing

Employees shall properly wash and sanitize their hands upon entering or reentering heat-processed product areas, and after contacting possible materials (mechanical equipment, debris, etc.).

(d) Aprons

Employees' aprons shall be clean, readily identified and, when not used, hung in designated area.

(e) Product Storage, Temperature

Exposed heat-processed product shall not be stored in same area with raw product. Its internal temperature shall not be kept between 40° F. and 120° F. for more than 2 hours. However, large mass solid products may be placed into a 40° F. cooler before they are chilled to 120° F. Small mass solid products must be chilled before bulk packing, unless it can be demonstrated that product reaches 40° F. within 2 hours. With appropriate equipment, fluid and semifluid products can be chilled as specified.

(f) Midshift Cleanup

All equipment--tables, trays, vats, etc.--directly contacting heat-processed products must be thoroughly washed and sanitized at midshift. Such equipment must not be used interchangeably for raw and heat processed products unless completely cleaned and sanitized. Portable equipment shall be washed and sanitized in designated areas to prevent product or other equipment contamination.

When the same personnel cleans other departments, cleanup procedures should first be directed to heat-processed product areas.

(g) Microbiological Control and Monitoring

Official establishments conforming with all provisions of this section may be considered in compliance if they develop and implement an approved microbiological control and monitoring program (MCMC) in lieu of a midshift cleanup. The inspector in charge (IIC), in consultation with plant management, will evaluate and establish the degree of cleaning needed between consecutive shifts. A thorough cleanup will occur at the end of each production day.

(1) Approved program. An approved program must include:

(i) The establishment name and number, the program name, and the data control number, 220.

(ii) The control points that are critical to the operation of both the microbiological control and the microbiological monitoring parts of the Program.

The plant must identify the critical control points in the sanitation program that it will use to assure adequate microbiological control. Similarly, the plant must also identify the critical control points that it will use to assure adequate microbiological monitoring

* of the sanitation program. In each list, one of the critical control points will be that the plant will have written instructions to its employees detailing how the sanitation program will be accomplished (microbiological control) and how it will be verified (organoleptic and microbiological monitoring).

* 3. Guidance on the development of the items (i and ii) above is available from the regional office.

* (2) Program Development and Preliminary Test Period. The IIC may grant an establishment desiring to participate in an MCMP, a 30-day exemption from midshift cleanup to collect the preliminary test data and to develop the necessary program instructions, procedures, and specifications. Details for the preliminary testing can be obtained from the regional office.

* (3) Evaluation Period. The plant will continue to operate the program as proposed during the evaluation period. The regional office will review the program, and if the program is unacceptable, the plant will be notified in writing and may be given the opportunity to modify it. The regional office will consult with the IIC and plant management to identify a reasonable time schedule for accomplishing the modifications.

* The plant will continue to operate the program during the modification period. However, if the plant is not responsive to the request for modifications, the IIC may recommend to the circuit supervisor that the program be discontinued and that the plant return to a thorough midshift cleanup.

* (4) Program Approval. After program approval, the IIC shall:

* (i) Become familiar with details of approved procedures.

(ii) Monitor plant adherence to procedures. Evaluate program effectiveness and deviations, including frequent reviews of plant records.

(iii) Assure adequacy of their identification and investigation of potential problems (higher-than-normal counts).

(iv) Assure adequacy of their response when an assignable cause or a presumptive cause is found.

(5) Changes. Proposed revision to update and/or improve the program should be submitted to the regional office through the IIC.

(h) Termination of Program.

(i) The official establishment may terminate the program at any time by returning immediately to a thorough midshift cleanup, followed by written notification to the regional office.

(ii) The IIC will consult with the circuit supervisor before returning the establishment to a midshift cleanup; (1) when the plant refuses to adhere to program procedures; (2) fails to use the monitoring to detect problems and adjust the program procedures; or (3) when basic sanitation is lacking.

ANTE-MORTEM INSPECTION

PROCEDURE

Subpart 9-A

(Regs: M-309; P-Subpart J)

9.1 PURPOSE

Ante-mortem inspection is to accept only animals (livestock or poultry) capable of producing products acceptable for use as human food. Such inspection removes from human food channels animals: (1) obviously unfit for human food because of diseases or abnormalities; (2) with diseases or conditions difficult to detect on routine post-mortem inspection (central nervous system disorders, chemical poisoning); (3) with zoonotic diseases (ornithosis, poultry erysipelas, etc.). It also prevents unnecessary contamination of slaughtering departments, and provides information on suspect animals for post-mortem inspection.

9.2 FACILITIES, EQUIPMENT, LOT

The establishment will provide adequate facilities, equipment, and necessary supplies, and will determine the number of animals (livestock or poultry) comprising a lot. Ante-mortem inspection shall be performed only on lots identified for slaughter by the establishment.

9.3 ASSISTANCE

Plant management shall provide sufficient employees to move, segregate, restrain, identify, and dispose of animals as requested by the inspector.

9.4 INSPECTION DAY

Ante-mortem inspection must be made by an MPI employee--veterinarian, or inspector under veterinary supervision --before daily slaughter operations begin, except for low volume plants (see section 9.8), and according to regulations and/or instructions issued by the Administrator.

Subsequent inspections. These shall be made, as necessary. Inspectors assigned to small plants may have to stop post-mortem inspection procedures to perform ante-mortem inspection.

9.5 OBSERVATION

(a) Livestock

Cattle, calves, swine, sheep, goats, horses, or other equines shall be observed when at rest and in motion.

(1) At rest. The inspector shall observe cattle, large calves, boars, stags, sows, horses, or other equines from outside the pen; small calves, butcher swine, sheep, and goats from inside.

(2) In motion. All animals shall be observed on both sides while in motion.

A mirror may be used to view the opposite side of each animal.

Excitement of animals should be avoided.

(b) Poultry

Poultry shall be observed while they are in coops or batteries before or after removal from truck(s).

9.6 SEGREGATION

Animals (livestock or poultry) showing signs of abnormalities or

and after slaughter and were found suitable for human food.

c. The product has been heated to an internal temperature of at least 75° C. (167° F.) and does not contain additives not permitted under Danish legislation.

d. Neither the birds nor the meat, in accordance with U.S. legislation, has been treated with chemical or biological substances, or in any other way which could represent a health hazard to consumers.

e. This is to certify that the product described on this certificate was processed in an official U.S. establishment certified for export to the Federal Republic of Germany and/or the United Kingdom.

Item d can be routinely certified on the basis that all products must be safe for human health to meet U.S. standards.

The above certification statements are to be typed in the "remarks" block of MP Form 130. If more space is needed, use the reverse side.

Danish officials will accept poultry products cooked to an internal temperature of 160° F., as required by regulations (381.150). Research has proven that when cooked poultry is removed from the cooker at 160° F., its internal temperature continues to rise for several minutes and then drops very slowly to room temperature. Therefore, the above certification can be made on this basis.

The following additives, normally used in the United States, are permitted by Danish legislation in the amounts shown:

Butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), propyl gallate----- 50 mg/Kg

Citric acid, monoisopropyl citrate, monoglyceride citrate----- 50 mg/Kg

Algin, carrageenan, carboxymethyl, cellulose (cellulose gum), vegetable gums, methyl cellulose----- 5 gm/Kg

Anatto----- 20 mg/Kg

Carotene ----- 50 mg/Kg

Nitrites----- 150 mg/Kg

Ascorbic acid, sodium ascorbate,	-----	500 mg/Kg
Acetylated monoglycerides, diacetyl tartaric acid esters of mono- and diglycerides, mono- and diglycerides (glycerol palmitate, etc.)	---	5 gm/Kg
Disodium inosinate, disodium guanylate	-----	50 mg/Kg
Monosodium glutamate	-----	3 gm/Kg
Phosphates listed in section 381.147 (f)(3) of the poultry inspection regulations	-----	5 gm/Kg

(d) Personal Consumption

Only processed meat and poultry products in reasonable quantities for personal consumption may be brought into Denmark by tourists and others without export certificate.

22.30 DOMINICA

Issue MP Form 130 for meat for poultry products.

22.31 DOMINICAN REPUBLIC

(a) Meat Products

Export certificate to be visaed by consul of that country.

(b) Poultry Products

Official certification is required on MP Form 130 stating that product is Grade "B" or better, and has been under refrigeration for not more than 4 months.

22.31-A EUROPEAN ECONOMIC COMMUNITY (EEC)

(a) Plant Approval Requirements

(1) General. The following requirements must be met in both meat and poultry plants:

a. Handwashing facilities throughout the plant must be other than hand operated and supplied with hot and cold water.

b. Sanitizers, with a water temperature not less than 180° F., must be conveniently located where hand tools are used.

- c. Employee welfare facilities must include lockers (or alternate devices for storing employee's outer garments) and showers. Separate dining facilities should be provided.
- d. Toilet rooms must not open directly into work rooms.
- * e. Acceptable work habits must be encouraged for personnel; e.g., hands should be washed before starting work; protective clothing and equipment should not be taken into toilet rooms; clothing and hand tools should not be placed on product or working surfaces during breaks.
- f. Product containers must not come in direct contact with floor surfaces.
- g. Final packaging operations must be so situated as to prevent risk of contamination.
- h. The use of wood, e.g., wooden-handled tools, brooms, pallets, etc., in unprotected cooked product areas is not allowed and the plant must have a program to eliminate wood from unprotected raw product areas.
- i. Reuse of shipping containers; e.g., heavily waxed cardboard cartons, are not permitted for product which may eventually be destined for an EEC country.
- j. The walls must be smooth with angles and corners that are readily cleanable.
- k. Workers must wear protective clothing, including head covering and water resistant footwear. Exposed street clothing is not acceptable.
- (2) Meat plants.
- * a. A separate room or area be provided for flushing, cleaning, and separating stomachs and intestines. If this operation is not separate from the slaughter area, provisions must be made for effectively confining wastes and splash from other operations by such means as partial partitions, separate drainage, etc.
- (3) Poultry plants.
- a. Poultry crates for live birds must be constructed of water impervious material (wood unacceptable) and must be cleaned each time they are emptied.
- b. Pre-slaughter stunning is required (an exception is permitted for religious purposes).
- c. Handwashing facility is required in hanging area.
- d. The stunning and bleeding area must be separated from the hang-on bay for live birds.
- e. Handwashing facility and sanitizer is required in bleeding area.
- f. Cutting/deboning operations must be physically separated (by a wall or solid partition extending from floor to ceiling) from eviscerating, giblet processing and immersion chilling operations.
- g. Immersion chilling or carcasses must comply with the following:
1. Immersion chilling system shall be a true counterflow, that is, carcasses must move through the chiller against the flow of the water.
 2. Potable water shall enter the carcass exit end and overflow at the carcass entrance end of chiller.
 3. The carcasses must pass * through one or more tanks of water * or of ice and water the contents * of which are continuously renewed. * Only the system whereby the carcasses are constantly propelled by * mechanical means through a counter- * flow of water is acceptable. *
 4. There shall be two temperature recording devices for recording the chill media temperature, one at the carcass entry end and one at the carcass exit end of the chiller. The chill media temperature shall not exceed 61° F. at the carcass exit end.
 5. There shall be a water meter * on the chilling system and a water meter on the final washer.
 6. Listed below is the amount of * water required per bird:
- | Washer | Chiller | Bird Size | RTC |
|-----------|-----------|----------------|-----|
| 0.40 gal. | 0.65 gal. | Up to 5.5 lbs. | |
| 0.65 gal. | 1.00 gal. | 5.5 to 11 lbs. | |
| 0.90 gal. | 1.50 gal. | Over 11 lbs. | |
7. Water requirements for final * washer are calculated and recorded in the same manner as presently done for the chiller.
8. Since poultry slaughter plants * may have to alter their operating

practices when producing product for the EEC, it will be necessary that plant officials notify inspection personnel in advance of producing product for export to the EEC or for cutup at another certified plant. Plant officials at the slaughter plant must also identify and ship the product to the cutup plant in a manner acceptable to the IIC. The * alterations should include a check * to see that metering devices are * functioning properly and that a * record of the water usage is * maintained.

* 9. Slaughter plants may wish to look into utilizing a procedure whereby clean eviscerated poultry is cut or boned in the hot state without subjecting it to immersion chilling. Movement of poultry carcasses direct from slaughter line to cutting room for immediate cutup, packaging, and subsequent chilling is acceptable. Slaughter plants also may wish to consider cooking whole birds, parts or boneless poultry immediately after post-mortem inspection in lieu of immersion chilling.

22.32 Egypt, (ARAB REPUBLIC OF)

(a) General Requirements.

(1) Labeling. Meat and poultry products (including canned) must bear the following in addition to required label features:

- a. Bilingual labels,
- b. Statement of Islamic slaughter,
- c. Production date (slaughter, packaging or freezing dates). Spell out or abbreviate name of month: (Jan. plus year),
- d. Expiration date. Spell out or abbreviate name of month plus year,
- e. Metric net weights. Lettering and numbers for unit metric weight must also be in Arabic.

(2) Product arrival and expiration dates.

(i) Meat. Frozen meat (including beef and sheep livers) must be shipped from the U.S. within 2 months of production date. The bill of lading will be used to confirm the date of

shipping. There is no fixed expiration date on meat products. One year is suggested as a reasonable expiration date. Livers must have lymph nodes attached.

(ii) Poultry. Frozen poultry must be shipped from the U.S. within 2 months of production date, arrive in Egypt within 3 months of production date, with an expiration date within 9 months from production date. The same time restrictions apply to poultry giblets.

(b) Certification.

(1) Export certificate. Before issuing the MP Form 130 covering product to be shipped to Egypt, inspectors must read the specifications to assure that all FSIS certifications set forth in the bids are met. Exporters wishing to certify special characteristics of product such as types of pack or cut, weight range of product, quality, type, etc., to satisfy supplier-purchaser agreements or specifications, may obtain such certification on a reimbursable basis from the USDA/AMS grading services.

(c) Islamic Requirements.

(1) Islamic Centers. Copies of the list of Islamic Centers are available from RD or ECS.

(2) Certificate of Islamic Slaughter.

In addition to FSIS certification, the exporter must obtain a certificate of Islamic slaughter from a member of an Islamic Center. The certificate must be endorsed by the U.S.-Arab Chamber of Commerce or by an Egyptian consulate. The telephone number of the U.S.-Arab Chamber of Commerce is (202) 293-3162.

(d) Egyptian Import Inspection.

(1) Laboratory sampling. Random samples for Salmonellae are collected on meat and poultry product entering Egypt. Beef is accepted when 10 percent or less of the samples are positive. Poultry is accepted when

20 percent or less of the samples are positive. Country of origin tests, prior to shipment, are not honored by Egypt.

(2) **Moisture control.** Poultry drip requirements are 6 percent calculated on basis of purge after thawing.

22.33 ECUADOR

Meat Products

Certificate to be visaed by consul of that country.

22.34 FIJI

Poultry Products

Cooked poultry meat may be exported to Fiji under certification similar to that required for New Zealand (section 22.66(b)). The supplementary certification statement required by New Zealand will suffice for Fiji.

Fiji authorities request that U.S. poultry plants interested in the market send small experimental shipments at first.

22.35 FRANCE

(a) Meat Products

Issue MP Form 412-11 and MP Form 81 for fresh/frozen meats and meat byproducts. Item II of MP Form 412-11, "Address of the Approved Slaughterhouse or Houses," should show the plant where product was last handled or packed.

(1) **Whole livers.** Beef and sheep livers must be inspected according to the procedure required on beef and sheep livers for West Germany (see figure 22.2). Whole skinned and deveined livers are also acceptable if suitably and individually packed, i.e., vacuum packed, shrink packed, etc.

(2) **Skinned, trimmed, and sliced beef liver.** The transverse incisions described above are not required for

beef livers which will be skinned, trimmed and sliced.

(3) **Branding.** Organs such as livers, tongues, hearts, etc., from swine, sheep, or goats need not be branded. Boneless or bone-in meat cuts weighing more than $6\frac{1}{2}$ pounds must be branded.

(4) **Freezing.** Meats must be frozen and stored at temperatures no higher than -10° C. ($+14^{\circ}$ F.). Meat byproducts must be frozen and stored at temperatures no higher than -12° C. ($+10.4^{\circ}$ F.).

(i) **Freezing dates.** They must be:

- Stamped on outside labels (sec. 22.35 (a)(8)).

- Followed by "C" if the product has been frozen once, or by "T" if the product has been thawed and refrozen.
- Shown on MP Form 81. If the freezing dates vary, enter the first and last dates. The month may be spelled out or abbreviated, but it must not be shown numerically.

(ii) **Trichinæ destruction.** Fresh pork, including tongues, may be certified for export if frozen as follows:

- 30 days at -15° C. ($+5^{\circ}$ F.)
- 20 days at -23° C. (-9.4° F.)
- 12 days at -28° C. (-18.4° F.)

(5) **Pork.** For pork or products with pork, the following statement must appear on MP Form 412-11:

"This product is derived from animals originating outside any zone restricted because of hog cholera and/or swine vesicular disease."

Ces produits de porc ou d'abats de porc ne sont pas de provenance d'animaux eleves dans une zone en quarantaine pour peste porcine ou maladie vesiculeuse de porc."

The French definition of restricted zone is that farm, county, or state(s) placed under official quarantine or other restriction due to an animal disease.

For fresh/frozen and uncooked pork and products containing pork muscle tissue, the following statement is

for the Importation of Beef and Pork and of Products Manufactured from such Meat," is signed by an MPI veterinarian, the title "Veterinary Officer" should be crossed out, and if signed by a military veterinary officer, the title "Official Veterinarian" should be crossed out. All four copies of MP Form 62 should be signed individually and distributed the same as MP Form 130.

2. Poultry. Issue MP Forms 130 and 70. MP Form 70 is not required if the product has been heated to an internal temperature of at least 65° C. (149° F.), and this is so indicated on MP Form 130.

(2) Commercial shipments. When shipments by commercial firms to the military in West Germany (where product is held for sale only to the military) are made without DPSC Form 300, issue export certificates described in (b).

22.39 GREAT BRITAIN - UNITED KINGDOM

(a) Meat Products

- * Further processed (canned, cooked, cured, or rendered) meat products except those for U.S. military forces, must originate in MPI certified plants.

(I) Plant approval. Plants, including horsemeat plants, desiring to export further processed (canned, cooked, cured, or rendered) meat products to the United Kingdom (UK) must meet the requirements of this section and submit an application (MP Form 31) through RD to the Deputy Administrator.

(i) Facilities and equipment. All requirements in Section 22.31-A(a)(1) must be met.

(ii) Inspection supervision. In further processing plants either a veterinary inspector or a food inspector should be present during the production run for the UK. In those cases

where a food inspector is in charge, * an MPI veterinarian should visit the * establishment at least once a month and * file a brief report of his findings; * this report should be available for * examination by visiting UK reviewers. * For all consignments destined for export* to the UK, veterinary authorities must * assure that all UK requirements have * been met.

(iii) Flow of product. The production departments should be divided * into two self-contained sections; one * dealing with reception and preparation * of the raw meat, and the other dealing * with cooking, packaging and freezing * procedures. The principal aim in the separation of the premises into two * sections should be to ensure that * there is no risk of raw meat and * cooked meat having contact with each * other and to ensure a logical flow * from raw to cooked product with no * back tracking or line crossing of * product, equipment, or personnel. * Each section should have its own * separate welfare facilities. Communicating doors between raw and * cooked sections should be tight * fitting when closed. Doorways with * in the individual section may be * fitted with properly maintained * plastic curtains.

(iv) Room temperature. Adequate * temperature control must be main- * tained for cutting/boning, curing, * and slicing rooms.

(v) Canning.

1. Preliminary checks must be made on empty cans received from the manufacturer. Besides visual seam checks, side seam measurements must be made and recorded.

2. Seam checks must also be made on filled cans during production with the frequency determined by the volume. Can seam evaluation should address the following critical factors: a. Free space, b. Percentage overlap, c. Side seam juncture,

- d. Counter sink depth, and e. Tightness rating. Records on empty and filled cans should be maintained for 3 years.
- * 3. If water is used for cleaning empty cans it must be 180° F.
 - * 4. Filled and seamed cans must be thoroughly washed by mechanical means before processing.
 - * 5. Retorts and retort baskets must be maintained in a clean condition.
 - * 6. Automatic time and temperature recording devices for retorts must be lockable and calibrated regularly.
 - * 7. After heat processing and preliminary water cooling, touching of cans by hand prior to drying is to be discouraged.
 - * 8. Can drying locations must be situated in areas of the plant so as to prevent any risk of contamination.
 - * 9. All cans in the UK official sample must be opened and the contents subjected to an organoleptic and pH examination. FSIS has determined the UK official sample will be 5% of samples incubated by USDA with a minimum of one can per production shift.
 - * 10. Water samples should be taken from a variety of points through the establishment at least once every month. Plant quality control laboratories may be utilized. Samples should be tested for coliform organisms and total aerobic colonies made after 5 days incubation at 20-22° C. (68-71.6°F.).
 - * a. If any 100 ml sample shows the presence of coliform organisms, new samples should be drawn from the sampling point and be examined immediately. If re-sampling also shows the presence of coliforms, steps must be taken immediately to remove the pollution.
 - * b. Total aerobic colony counts under most circumstances should not exceed more than 100 organisms/ml after incubation for 5 days at 20-22° C. If any sample exceeds 100/ml, * follow-up sampling must be conducted * immediately.
 - c. Those plants which treat their own water supplies which are obtained from rivers, canals, etc., shall ensure that full treatment is carried out. This includes sedimentation (with or without flocculation), filtration, and chlorination. The method of chlorination shall be sufficient to produce, after 20 minutes contact time, a minimal free residual chlorine content of 0.5 ppm at the point of use. Means of chlorination should be automatic and the equipment should be fitted with an alarm system to warn of failure in the chlorination system. Drip and siphon systems are not acceptable. For bacteriological examination of chlorinated water supplies, the chlorine in the sample should be neutralized with sterile sodium thiosulfate. Failure to neutralize the chlorine may give false negative results. DPD-1 tablets should be used for rapid colorimetric estimations of chlorine.
 - 11. All can cooling water shall be chlorinated in a manner that permits 20 minutes of contact time with chlorine prior to use. A level of at least 0.5 ppm free residual chlorine must be consistently demonstrable at the cooling water exit. If cooling water is recirculated, it must be filtered before re-use. UK requires weekly total plate counts on can cooling water (See 10.b. above). Plants must record chlorine level measurements during each retorting cycle and at least hourly in continuous retorting processes.
 - 12. Detailed reports on all water sampling shall be on file and available to inspection personnel. Records applicable to UK requirements shall be maintained for 3 years.

(2) Eligible product; certification.

It is the responsibility of the importer to assure that products meet the compositional standards expressed in the British "Sausage or Other Regulations 1967."

All certificates and supplementary statements must be signed by an MPI veterinarian. Certain federally inspected plants are approved by VS for immediate slaughter of cattle, sheep, and swine from Canada, and for cattle and sheep from Mexico. Meat and byproducts produced in such plants should not be certified for export to UK unless arrangements, satisfactory to the veterinarian in charge, are made to identify and segregate the articles from product intended for export to UK. The following products may be exported:

(i) Fresh/frozen. For meat and by-products from cattle, swine, calves, and sheep, issue MP Forms 130 and * 131. * * * The animal disease situation in the United States is such that * the required statement on MP Form 131 can be routinely made.

For meat and byproducts from equines (horse, ass, mule) type the following on the reverse of MP Form 414-3: "The horsemeat/offal contains no admixture of any meat or offal derived from any ruminant animal or swine." Horsemeat and horsemeat byproducts may originate from approved U.S. plants and from foreign plants certified for importation of these products into the U.S.

(ii) Processed. Importer must have a permit to import processed products which do not meet UK fully cooked requirements. The permits specify the certification statements required. Recent permits required MP Form 130 plus certification statements similar to those specified * on MP Form 131, and that African swine fever has not occurred in the United States during previous 12 months.

An additional statement for fully cured bacon, ham and pork spare ribs was as follows: "The product has

been subjected to pumping with brine under a pressure of 80 lbs. or more to the square inch and subsequently soaking in brine or dry salting for a period of not less than 4 days; or salting (wet salting or dry salting) for a period of not less than 10 days.

Additionally, the following statement was required for sliced bacon: "The pumped bacon was subjected to pumping with brine under a pressure of 50 lbs. or more to the square inch and subsequently smoking for a period of not less than 12 hours at a temperature of not less than 120°F.

(iii) Cooked. Meat/byproducts from all species must be fully cooked. UK considers meat fully cooked if pink juices cannot be expressed. Type the following statement on MP Form 130:

"I certify that the meat described in the schedule below has been prepared under the terms and conditions of an official certificate recognized by the Minister of Agriculture, Fisheries and Food, and the Secretary of State for Scotland in accordance with the provisions of the Imported Food Regulations 1968 (or the Imported Food (Scotland) Regulations 1968)."

(iv) Canned. Shelf-stable canned product from all species, packed in hermetically sealed metal or glass containers, may also be exported. Issue MP Form 130.

(v) Product for U.S. military forces. Certification requirements are the same as for commercial shipments.

(vi) "Papain" kidneys. When they are to be shipped for edible purposes, they must be (1) from federally inspected carcasses, (2) handled as edible product, (3) kept identified, and (4) packed in containers labeled "Beef Kidneys - Tendered with Papain--For Export Only."

(vii) Casings. They must:

1. Originate from animals slaughtered in plants certified for export to the UK and the establishments which process the casings must also be certified for export to the UK.
2. Be accompanied by a declaration on USDA letterhead stationery signed by an authorized veterinary officer stating that the casings were cleaned and scraped.
3. Be identified by approved label with inspection legend including an establishment number in the 3,000 series (Food Inspection Service.)
4. Upon exporter's request be accompanied by MP Form 415-5.

In order to comply with the UK requirements, plants wishing to export casings to the UK will have to apply for (Food Inspection Service).

* * *

(viii) Fats, oils.

1. Certification. Issue MP Form 130. Original must accompany shipments. Shipments arriving without certificate will be refused entry. Include the following on the export certificate:

a. Location of tanks. For example, Port #3 or Starboard #2 shall be shown in the space for "Shipping Marks" and "Stamp Numbers." Tanks shall be identified again in the "No. Column" as P-3 or S-2.

b. For each tank, the estimated product weight shall be listed in the weight column. Such weight may be obtained from marine surveyor.

c. A statement of cleanliness should be made in the description column to read: "The pipes and pumps used for loading lard or fat and the tanks were inspected and found to be clean before the lard or fat was loaded."

2. Requirements:

a. Ship tanks. They will be inspected and passed for cleanliness before product is loaded onto the

ship. Marine surveyors will do this inspection under general inspector's supervision. To be acceptable, tanks must be clean, dry, and free of residues from previous cargoes.

b. Product from I.D. Service. When product is shipped from an Identification (ID) Service place, an inventory of federally inspected lard or rendered fats will be maintained. Records will include additions to and removals from each storage tank. Inspector should be able to estimate product amount in storage at any time. An inspection opening is required on each tank. Transfer from tank to ship is permitted only through a line without other connections than to the tank. Product transfer may also be accomplished by use of tank trucks. Ship tanks shall be examined to assure they are empty before operations start. Loading will be done under continuous supervision of the inspector. If operations are interrupted for any reason, the hatch on the tank must be sealed. The seal must not be broken until operations are resumed.

c. Label. Approved label(s) bearing printed inspection legend with establishment number (317.2) will be attached to the export certificate. Establishment number will be in the 3,000 series for product shipped from an ID Service installation. One export stamp will be issued for each ship's tank. Stamps shall be attached to all hatches of filled tanks. Original export certificate and attached label(s) shall be delivered to the shipper, who shall deliver them to the chief officer of the vessel carrying the shipment. The chief officer shall present the certificate and label(s) to the port health authority on arrival in UK.

d. Antioxidants. Edible fats and oils may contain antioxidants in the following amounts:

Propyl gallate, octylgallate, dodecylgallate, or any mixture of the three-----100 ppm

Butylated hydroxyanisole (BHA)200 ppm
 Butylated hydroxytoluene (BHT)200 ppm
 Any mixture of BHA and BHT----200 ppm
 Citric Acid-----100 ppm

When product contains antioxidants, the label must include a description of antioxidants, and maximum amount expressed in parts per million.

(3) Marking, labeling. UK recognizes the Federal meat inspection legend, with establishment number of producing plant, as being the "official certificate" for importation of product from the United States. Such legend must be as required by regulations (312.2), and must be affixed to all shipping cartons and packages of meat or meat products. For large containerized shipments (vans), it must be attached to the container. If the container holds product from more than one plant, it must bear an inspection legend from each official plant represented by the product inside. Legend or product label with inspection legend may be applied to containers at places outside official plants by using ID Service (R).

To comply with regulations (322.4), issue MP Form 130 and mark outside containers as required by Section 312.8 of the regulations.

(4) Prohibited importation. The following importations are prohibited:

a. Scrap meat. Meat consisting of scraps, trimmings, including beef tongue trimmings, or other pieces (with or without bone) of such shape or in such condition as to afford insufficient means of identification with a definite part of a carcass.

b. Any carcass part chopped or minced with or without spices, cereal products, salt, flavoring, vegetables, or other ingredients.

Exception: Beef patties, flake steaks, fresh beef or pork sausage, etc., may be shipped to the military.

c. Heads without submaxillary lymph nodes.

d. Livers without hepatic lymph nodes. These nodes must be incised and left attached to the livers. **Exception:** Hepatic lymph nodes are no longer required to be attached to beef, sheep and pork livers (Only whole livers are eligible). *

e. Boneless meat from calves less than 3 months old.

f. Products containing erythorbic acid or sodium erythorbate.

(5) Ports of Entry. Fresh, chilled, or frozen meats or by-products may enter UK only through the following ports: Avonmouth, Cardiff, Dover (Eastern Docks), Felixstowe, Folkstone, Great Yarmouth, Grimsby, Harwich, Liverpool, London (Royal Group), London (Tilbury), Newhaven, Plymouth, Sheerness, Southampton, and Tyne (North Shields).

Processed or canned products are permitted entry at all ports.

(b) Poultry Products

(I) Plant approval. Federally inspected plants desiring to export poultry products to the UK must submit an application (MP Form 31) to RD. In certifying such plants, RD will ascertain that the requirements specified in Sections 22.31-A(a)(1) and (3) are fulfilled.

An MPI veterinary inspector should be present in poultry slaughterhouses during production for the UK. See Section 22.39(a)(1)(ii), (iii), (iv), and (v)10. for further information.

Additionally, the immersion chill media cannot be recirculated either inside or outside of the chiller or pumped from the chiller to a heat exchanger and returned to the chiller.

(2) Eligible product; certification.

(i) Fresh poultry. Fresh/frozen poultry has been prohibited since September 1, 1981.

(ii) **Cooked/canned poultry.** Cooked poultry must originate from carcasses which were derived from slaughter plants certified as eligible to * export to the UK. See (a)(1)(v) and *(b)(1).

(iii) **Dehydrated poultry; rendered fat.** Dehydrated chicken (poultry) and rendered poultry fat may be certified for export without issuing MP Form 412-14. Allowances for antioxidants are specific. Butylated hydroxyanisole and butylated hydroxytoluene are permitted in anhydrous edible oils and fats to the extent of 200 ppm. Propyl gallate is permitted to the extent of 100 ppm.

(3) **Ships' stores.** When poultry carcasses are exported for ships' stores, the following requirements must be met:

- a. Eviscerated carcasses may be accompanied by giblets.
- b. A specific veterinary certificate is not required.
- c. Carcasses must be frozen.
- d. Consignments must be imported into the port where poultry will be loaded on the ship. Cross country journeys of consignments between ports will not be permitted.
- e. Consignment must be moved, on landing, directly to a bonded warehouse at the port of import supplying the ship, and must be held there under Custom's bond. Poultry supplies should be taken directly from warehouse to ship.

If all these conditions are not met, importations for ships' stores must meet the same requirements as imports of poultry into UK.

(c) Products not for Human Consumption

(1) **Edible product for animal food.** The certification requirements are the same as those described for edible products with the exception that the livers need not have the hepatic lymph nodes incised or attached. The shipping cartons shall be labeled as follows: "Not for Human Consumption - for Export to UK."

(2) **Inedible products.** Inedible products can originate in any USDA plant. All inedible products except lungs must be decharacterized. The following statements are required to be issued on USDA/FSIS letterhead and signed by an MPI veterinarian:

a. The meat/offal is derived from animals slaughtered in abattoirs licensed for the production of meat for human consumption.

b. The meat/offal is derived from animals which received veterinary ante and post mortem inspection by an official Veterinary Surgeon and showed no evidence of the following diseases: Foot and Mouth disease, tuberculosis, brucellosis, anthrax, rabies, plus (for ruminants: cattle plague, bovine pleuropneumonia and enzootic bovine leukosis); (for swine: African swine fever, hog cholera, swine vesicular disease and Teschen disease).

c. The meat/offal has been obtained from animals that have been resident in the USA for at least 3 months prior to slaughter or since birth in the case of animals less than 3 months old.

d. The meat/offal has not been obtained from animals which come from a holding or area which for health reasons is under restriction for any of the diseases mentioned in b.

e. The meat/offal has not been obtained from a slaughterhouse which is under restriction as a result of Foot and Mouth disease.

f. (For swine: No vaccine against hog cholera containing a live or attenuated hog cholera virus has been used in the USA during the previous 12 months).

g. (For swine: There has been no outbreak of hog cholera in the USA during the previous 12 months).

The meat/offal must be placed in sealed cartons which are labeled: "Not Intended for Human Consumption."

Item b can readily be stated if the animals pass inspection. UK is aware that MPI inspectors perform

inspection under the supervision of veterinarians.

Item d refers to areas quarantined for diseases stated in b. The IIC should contact the nearest VS office to be certain animals to be slaughtered are not from quarantined areas.

The following additional statement is required for horsemeat/offal: "The inedible horsemeat/offal contains no admixture of any meat/offal derived from any ruminant animal or swine."

22.40 GREECE

The following certification requirements in (a) for fresh (frozen) meat and poultry exports to Greece are derived from changes in Greek law (Presidential Decree 653 of August 5, 1977). In addition to the requirements that must be satisfied in the certification, issued by an FSIS veterinary officer, there are several additional requirements in the Decree; e.g., freezing temperatures, storage time limitations, etc., that will not be covered by FSIS certification. The exporter/producer is responsible for such requirements. Copies of the Decree are available from MPI regional offices or FPD. Interested parties should become familiar with Greek specifications.

(a) Certification

Issue MP Form 130 for meat and poultry products. They must be visaed by Greek consul.

(1) Fresh/Frozen. For fresh (frozen) meat and poultry and edible byproducts thereof, issue also a hygienic veterinary certificate on departmental letterhead stationery containing the following information:

1. Identity and description of meats (under Greek definitions the term "meat" applies to meat and meat byproducts and poultry meat and poultry byproducts; the term "animal" applies to livestock and birds):

a. Number, name, and address of official establishment.

b. Name of products (anatomical or commercial terms for meat cuts and edible byproducts).

c. Species.

d. Number, type of packing, and markings of packages.

e. Gross and net weights.

f. Date(s) of slaughtering or freezing.

g. Mode of conveyance.

h. Full name and address of exporter.

i. Full name and address of importer (consignee).

2. Wholesomeness, packing, and marking:

I, the undersigned (full name and title), authorized Doctor of Veterinary Medicine certify that the above mentioned meats:

a. Were inspected by me today and found absolutely suitable for human consumption;

b. Came from animals which were examined before and after slaughter, were found free from communicable and ordinary diseases, and absolutely suitable for human consumption;

c. Originated, were slaughtered, and processed in areas declared by Veterinary Services to be free of foot-and-mouth disease for at least 3 months and free of African pest for at least 12 months prior to slaughter;

d. Derived from animals slaughtered, processed, packaged, and frozen in modern facilities operated under a national inspection program, thus qualified for export.

e. Contain no preservatives, colorants, and residues of antibiotics, oestrogens, pesticides, or gland suppressing substances at levels endangering the health of consumers;

f. Are packed and marked as described under 1 above.

3. Date and signature of veterinary official of meat and poultry inspection, visaed by Greek consular authorities.

(2) Canned and other processed products. Canned meat or poultry and other processed meat or poultry products must be accompanied by a certificate on departmental letter-head signed and dated by an MPI veterinarian which states the following:

a. The (species) from which the meat (poultry meat) is derived were slaughtered in slaughterhouses inspected by a government veterinary official.

b. The meat (poultry meat) is unquestionably fit for human consumption and originates from animals (birds) which have been subjected to ante- and post-mortem inspection and were found to be free of contagious diseases.

c. The products were inspected at the time of shipment and were found unquestionably fit for edible purposes.

d. The preparation and packing of these products were made under the same health provisions as applied in the United States under veterinary inspection.

e. The products are marketed in the same form and composition in the United States.

(b) Meat Products

(1) Fresh.

(i) Eligible product:

1. **Meat.** Whole carcasses, sides, quarters, "primal" cuts, and boneless meat of cattle, calves, sheep, goats, and swine; trimmings and head meat (without the mouth epithelium, the salivary and lymph glands) of beef in bulk.

UNITED STATES DEPARTMENT OF AGRICULTURE
Food Safety and Inspection Service
Meat and Poultry Inspection
Washington, DC 20250

MEAT AND POULTRY INSPECTION REGULATIONS

Date: JUNE 1983

Change Number: 83-6

MAINTENANCE INSTRUCTIONS

Remove Page

Insert Page

Subchapter A - Meat Inspection Regulations

135 - 136f-----135 - 136g

Subchapter C - Poultry Inspection Regulations

46a and 46b-----46a and 46b

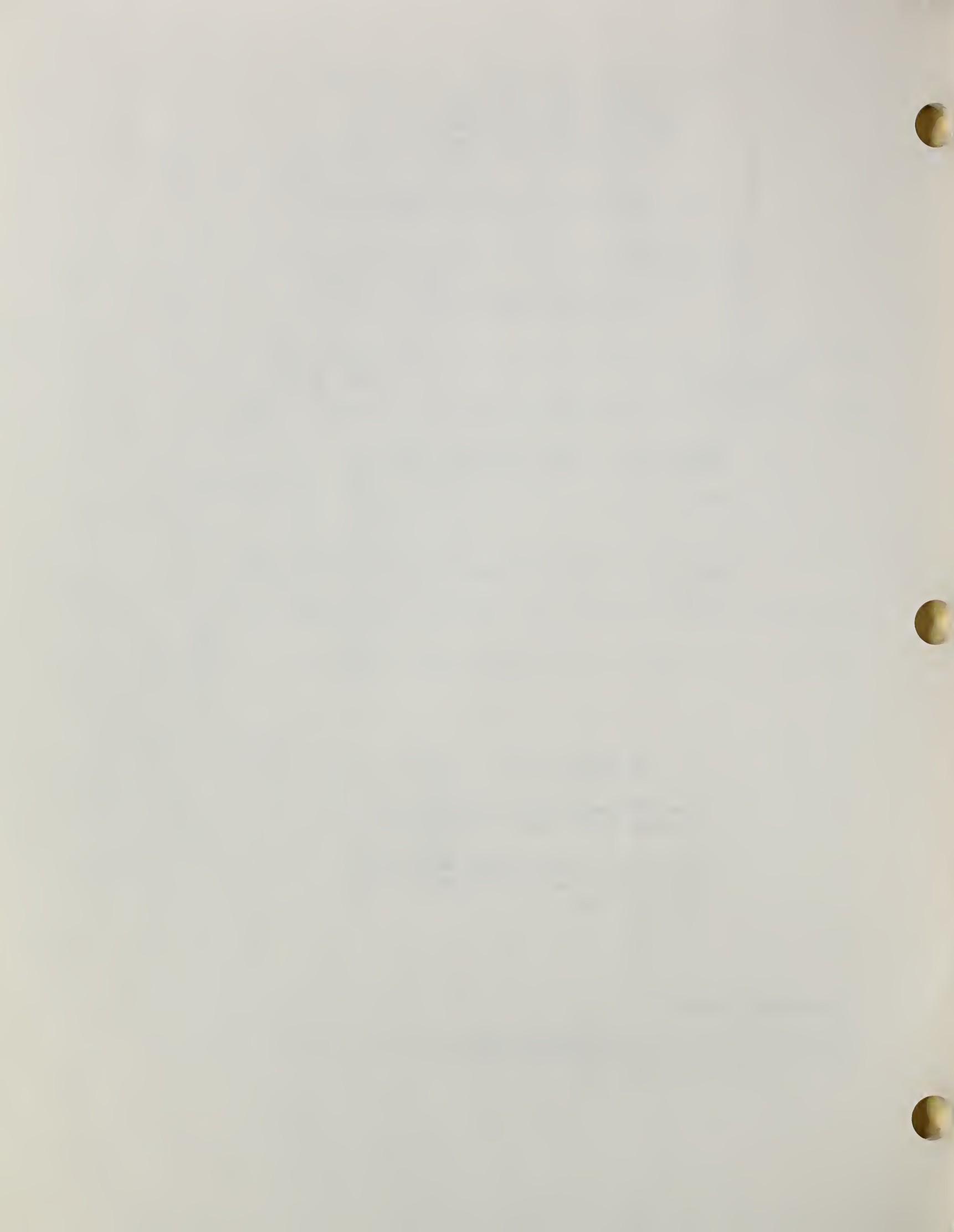
Effective Dates:

Post-Mortem Disposition of
Condemned Carcasses: 6-22-83

Production Requirements for Cooked
Beef, Roast Beef, and Cooked Corned
Beef: 7-1-83

Pen-and-Ink Changes:

On page 23 of the poultry inspection regulations, first line, change
"§ 318.35 continued" to read "§ 381.35 continued".



(§ 318.14(b) continued)

one-half of 1 percent available chlorine (5,000 parts per million) or other equivalent disinfectant approved by the Administrator¹ shall be applied to the surface of the rooms and equipment and rinsed with potable water before use.

(c) Hermetically sealed containers of product which have been contaminated by polluted water shall be examined promptly by the official establishment under supervision of an inspector and rehandled as follows:

(1) Separate and condemn all product in damaged or extensively rusted containers.

(2) Remove paper labels and wash the remaining containers in warm soapy water, using a brush where necessary to remove rust or other foreign material. Disinfect these containers by either of the following methods:

(i) Immerse in a solution of sodium hypochlorite containing not less than 100 parts per million of available chlorine or other equivalent disinfectant approved by the Administrator,¹ rinse in potable water, and dry thoroughly; or

(ii) Immerse in 212° F. water, bring temperature of the water back to 212° F. and maintain the temperature at 212° F. for 5 minutes, then remove containers from water and cool them to 95° F. and dry thoroughly.

(3) After handling as described in subparagraph (2) of this paragraph, the containers may be relacquered, if necessary, and then relabeled with approved labels applicable to the product therein.

(4) The identity of the canned product shall be maintained throughout all stages of the rehandling operations to insure correct labeling of the containers.

§ 318.15 Tagging chemicals, preservatives, cereals, spices, etc., "U.S. retained."

When any chemical, preservative, cereal, spice, or other substance is intended for use in an official establishment, it shall be examined by a Program employee and if found to be unfit or otherwise unacceptable for the use intended, or if final decision regarding acceptance is deferred pending laboratory or other examination, the employee shall attach a "U.S. retained" tag to the substance or container thereof. The substance so tagged shall be kept separate from other substances as the circuit supervisor may require and shall not be used until the tag is removed, and such removal shall be made only by a Program employee after a finding that the substance can be accepted, or, in the case of an unacceptable substance, when it is removed from the establishment.

§ 318.16 Pesticide chemicals and other residues in products.

(a) Nonmeat ingredients. Residues of pesticide chemicals, food additives and color additives or other substances in or on ingredients (other than meat, meat byproducts, and meat food products) used in the formulation of products shall not exceed the levels permitted under the Federal Food, Drug, and

¹ A list of approved disinfectants is available upon request to Scientific Services, Meat and Poultry Inspection Program, Food Safety and Inspection Service, U.S. Department of Agriculture, Washington, D.C. 20250.

(§ 318.16(a) continued)

Cosmetic Act, and such nonmeat ingredients must otherwise be in compliance with the requirements under that Act.

(b) Products, and meat, meat byproduct, or other meat food product ingredients. Products, and products used as ingredients of products, shall not bear or contain any pesticide chemical, food additives, or color additive residue in excess of the level permitted under the Federal Food, Drug, and Cosmetic Act and the regulations in this subchapter, or any other substance that is prohibited by such regulations or that otherwise makes the products adulterated.

(c) Standards and procedures. Instructions specifying the standards and procedures for determining when ingredients of finished products are in compliance with this section shall be issued to the inspectors by the Administrator. Copies of such instructions will be made available to interested persons upon request made to the Administrator.

§ 318.17 Requirements for the production of cooked beef, roast beef, and cooked corned beef.

* (a) Cooked beef and roast beef, including sectioned and formed roasts and chunked and formed roasts, and cooked corned beef shall be prepared by one of the time and temperature combinations in the following table. The stated temperature is the minimum which shall be produced and maintained in all parts of each piece of meat for at least the stated time:

TABLE FOR TIME/TEMPERATURE COMBINATION
FOR COOKED BEEF, ROAST
BEEF, AND COOKED CORNED BEEF

Minimum internal temperature		Minimum processing time in minutes after minimum temperature is reached
*	Degrees Fahrenheit	Degrees Centigrade
130	54.4	121
131	55.0	97
132	55.6	77
133	56.1	62
134	56.7	47
135	57.2	37
136	57.8	32
137	58.4	24
138	58.9	19
139	59.5	15
140	60.0	12
141	60.6	10
142	61.1	8
143	61.7	6
144	62.2	5
145	62.8	Instantly

(§ 318.17 continued)

* (b) Cooked beef, including sectioned and formed roasts and chunked and formed roasts, and cooked corned beef shall be moist cooked throughout the process or, in the case of roast beef or corned beef to be roasted, cooked as provided in paragraph (c) of this section. The moist cooking may be accomplished by (1) placing the meat in a sealed moisture impermeable bag, removing the excess air, and cooking, (2) completely immersing the meat, unbagged, in water throughout the entire cooking process, or (3) using a sealed oven or steam injection to raise the relative humidity above 90 percent throughout the cooking process.

* (c) Roast beef or corned beef to be roasted shall be cooked by one of the following methods:

* (1) Heating roasts of 10 pounds or more in an oven maintained at 250°F (121°C) or higher throughout the process;

* (2) Heating roasts of any size to a minimum internal temperature of 145°F (62.8°C) in an oven maintained at any temperature if the relative humidity of the oven is maintained either by continuously introducing steam for 50 percent of the cooking time or by use of a sealed oven for over 50 percent of the cooking time, or if the relative humidity of the oven is maintained at 90 percent or above for at least 25 percent of the total cooking time, but in no case less than 1 hour; or

* (3) Heating roasts of any size in an oven maintained at any temperature that will satisfy the internal temperature and time requirements of paragraph (a) of this section if the relative humidity of the oven is maintained at 90 percent or above for at least 25 percent of the total cooking time, but in no case less than 1 hour.

* The relative humidity may be achieved by use of steam injection or by sealed ovens capable of producing and maintaining the required relative humidity.

* (d)(1) Except as provided in paragraph (d)(2) of this section, establishments producing cooked beef, roast beef, and cooked corned beef shall have sufficient monitoring equipment, including recording devices, to assure that the time (within 1 minute), the temperature (within 1°F) and relative humidity (within 5 percent) limits required by these processes are being met. Data from the recording devices shall be made available to a program employee upon request.

* (2) In lieu of recording devices, establishments may propose in the written procedures prescribed in paragraph (f) of this section, an alternative means of providing inspection personnel with evidence that finished product has been prepared in compliance with the humidity requirements of paragraphs (b) and (c) of this section, and the 145°F (62.8°C) temperature requirement of paragraph (a) of this section.

(e) Each package of finished product shall be plainly and permanently marked on the immediate container with the date of production either in code or with the calendar date.

(f) In order to assure that cooked beef, roast beef, and cooked corned beef are handled, processed, and stored under sanitary conditions, the establishment shall submit a set of written procedures through the inspector in charge for approval by the Regional Director. The written procedures shall contain the following information:

* (1) The temperature to which raw frozen product is thawed and the time required.

* (2) The lot identification procedure for lots of product during processing.

* (3) The storage time and temperature combinations which the establishment intends to use before cooking, the cooking time and temperature the

(§ 318.17(f) continued)

* establishment intends to use, and the time, if any, the establishment intends
* to wait after cooking and before cooling.

* (4) If a code, instead of a calendar date, is used on the immediate
container of the finished product, its meaning shall also be included.

* (5) Any other critical control points in the procedures which could
affect the safety of the product.

* (6) In lieu of recording devices, the alternate means permitted by
§ 318.17(d)(2) of providing evidence to inspection personnel that the
finished product will be prepared in compliance with temperature or humidity
requirements.

* (7) Any other alternate procedure used that is permitted in this
section.

(g) The establishment shall maintain records and reports which document
the time, temperature, and humidity at which any cooked beef, roast beef, or
cooked corned beef is cooked and cooled at the establishment. Such records
shall be kept by the establishment for 6 months or for such further period
as the Administrator may require for purposes of any investigation or litiga-
tion under the Act, by written notice to the person required to keep such
records. Such records shall be made available to the inspector and any duly
authorized representative of the Secretary upon request.

(h) The handling and processing of cooked beef, roast beef,
and cooked corned beef before, during, and after cooking shall be such
as to prevent the finished product from being adulterated. As a minimum, they
shall be controlled as follows:

(1) The establishment shall notify the inspector in charge which
processing procedure will be used on each lot, including time and
temperature.

(2) In order to assure uniform heat penetration and consequent adequate
cooking of each piece of beef, individual pieces of raw product in any one lot
shall either not vary in weight by more than 2 pounds or not vary in thickness
by more than 2 inches at the thickest part. Alternate methods of assuring
uniform heat penetration may be submitted in writing for approval to the
Regional Director.

(3) A water-based solution that is used for injecting or immersing the
meat shall be refrigerated to 50°F (10°C) or lower from the time it contacts
the meat, and shall be filtered each time it is recirculated or reused.

(4) A nonmeat ingredient, including the water-based solution in (h)(3)
above, which has contacted meat shall be discarded at the end of that day's
production unless it is in continuous contact with one batch of product.

(5) Product prepared for cooking shall be entered into the cooking
cycle within 2 hours of completion of precooking preparation or be placed
immediately in a cooler at a temperature of 40°F (4.4°C) or lower.

(6) The time and temperature requirements shall be met before any
product in the lot is removed from the cooking units. Unless otherwise
specified in the written procedures approved in accordance with paragraph
(f) of this section, the heat source shall not be shut off until these
requirements are met.

(7) Other than incidental contact caused by water currents during
immersion cooking or cooling, product shall be placed so that it does not
touch or overlap other products. This provision does not apply to product
that is stirred or agitated to assure uniform heat transfer.

(8) Temperature sensing devices shall be so placed that they monitor
product in the coldest part of the cooking unit; and when oven temperature is
required by paragraph (c) of this section, the oven temperature shall also be
monitored in the coldest part of the cooking unit.

(§ 318.17(h) continued)

(9) If a humidity sensing device is required in an oven, it shall be placed so that it measures humidity in either the oven chamber or at the exist vent.

(10) Chilling shall begin within 90 minutes after the cooking cycle is completed.

(i) All product shall be chilled from 120°F (48.8°C) to 55°F (12.7°C) in no more than 6 hours.

(ii) Chilling shall continue and the product shall not be packed for shipment until it has reached 40°F (4.4°C).

(11) Any establishment that has experienced a cooking process deviation during preparation of product may either reprocess the product completely, continue the heating to 145°F (62.8°C), or contact the Regional Director for a review of the process schedule for adequacy and, if needed, for a cooking schedule to finish that one batch of product.

(12) An establishment that has experienced a cooling deviation after the product has been cooked shall contact the Regional Director to determine the disposition of that retained product.

(i) Cooked beef, roast beef, and cooked corned beef shall be so handled as to assure that the product is not recontaminated by direct contact with raw product. To prevent direct contamination of the cooked product, establishments shall:

(1) Physically separate areas where raw product is handled from areas where exposed cooked product is handled, using a solid impervious floor to ceiling wall; or

(2) Handle raw and exposed cooked product at different times, with a cleaning of the entire area after the raw material handling is completed and prior to the handling of cooked product in that area; or

(3) Submit a written procedure for approval through the inspector in charge to the Circuit Supervisor detailing the steps to be taken which would avoid recontamination of cooked product by raw product during processing.

(j) To prevent indirect contamination of cooked product:

(1) Any work surface, machine, or tool which contacts raw product shall be thoroughly cleaned and sanitized with a solution germicidally equivalent to 50 ppm chlorine before it contacts cooked product;

(2) Employees shall wash their hands and sanitize them with a solution germicidally equivalent to 50 ppm chlorine whenever they enter the heat processed product area or before preparing to handle cooked product, and as frequently as necessary during operations to avoid product contamination; and

(3) Outer garments, including aprons, smocks, and gloves shall be especially identified as restricted for use in cooked product areas only, changed at least daily, and hung in a designated location when the employee leaves the area.

(k) Cooked product shall not be stored in the same room as raw product unless it is first packaged in a sealed, water-tight container or is otherwise protected by a covering that has been approved, upon written request, by the Circuit Supervisor. (Approved by the Office of Management and Budget under OMB #0583-0015.)

§ 318.18 Handling of certain material for mechanical processing.

Material to be processed into "Mechanically Separated (Species)" shall be so processed within 1 hour from the time it is cut or separated from carcasses or parts of carcasses, except that such product may be held for no more than 72 hours at 40° F. (4° C.) or less, or held indefinitely at 0° F. (-18° C.) or less. "Mechanically Separated (Species)" shall directly after being

(§ 318.18 continued)

processed, be used as an ingredient in a meat food product except that it may be held prior to such use for no more than 72 hours at 40° F. (4° C.) or less or indefinitely at 0° F. (-18° C.) or less.

PART 319-DEFINITIONS AND STANDARDS OF IDENTITY OR COMPOSITION

AUTHORITY: The provisions of this Part 319 issued under sec. 21, Federal Meat Inspection Act, as amended by the Wholesome Meat Act (21 U.S.C. Supp., sec. 601 et seq.), and Public Law 91-342; Talmadge-Aiken Act of Sept. 28, 1962 (7 U.S.C. 450); Act of July 24, 1919 (7 U.S.C. 394); subsection 21(b), Federal Water Pollution Control Act, as amended by Public Law 91-224 and by other laws.

Subpart A-General

§ 319.1 Labeling and preparation of standardized products.

Labels for products for which standards of identity or composition are prescribed in this part shall show the appropriate product name, an ingredient statement, and other label information in accordance with the special provisions, if any, in this part, and otherwise in accordance with the general labeling provisions in Part 317 of this subchapter, and such products shall be prepared in accordance with the special provisions, if any, in this part and otherwise in accordance with the general provisions in this subchapter. Any product for which there is a common or usual name must consist of ingredients and be prepared by the use of procedures common or usual to such products insofar as specific ingredients or procedures are not prescribed or prohibited by the provisions of this subchapter.

§ 319.2 Products and nitrates and nitrites.

Any product, such as frankfurters and corned beef, for which there is a standard in this Part and to which nitrate or nitrite is permitted or required to be added, may be prepared without nitrate or nitrite and labeled with such standard name when immediately preceded with the term "Uncured" in the same size and style of lettering as the rest of such standard name: Provided, That the product is found by the Administrator to be similar in size, flavor, consistency, and general appearance to such product as commonly prepared with nitrate and nitrite: And provided further, That labeling for such product complies with the provisions of § 317.17(c) of this subchapter.

§§ 319.3-319.4 [Reserved]

§ 319.5 Mechanically Separated (Species).

(a) Mechanically Separated (Species) is any finely comminuted product resulting from the mechanical separation and removal of most of the bone from attached skeletal muscle of livestock carcasses and parts of carcasses and meeting the other provisions of this paragraph. Examples of such product are "Mechanically Separated Beef", "Mechanically Separated Veal", "Mechanically Separated Pork", and "Mechanically Separated Lamb". At least 98 percent of the bone particles present in such product shall have a maximum size no greater than 0.5 millimeter in their greatest dimension and there shall be no bone particles larger than 0.85 millimeter in their greatest dimension. The product resulting from the separating process shall

(§ 319.5(a) continued)

not have a calcium content exceeding 0.75 percent, as a measure of a bone solids content of not more than 3 percent, and shall have a minimum PER of 2.5 (except as modified in paragraph (e)(1) of this section). Such product also shall have a protein content of not less than 14 percent and a fat content of not more than 30 percent, or it shall be deemed to be product for processing. Such product failing to meet the bone particle size, calcium, or PER requirements of this paragraph shall only be used in producing animal fats. Where such product meets the bone particle size, calcium, and PER requirements of this paragraph, it may also be used in the formulation of meat food products in accordance with § 319.6.

(b)-(d) [Reserved]

(e)(1) An essential amino acid content of at least 33 percent of the total amino acids present in "Mechanically Separated (Species)" shall be accepted as evidence of compliance with the protein quality requirement set forth in paragraph (a) of this section. For purposes of this paragraph, essential amino acid content includes isoleucine, leucine, lysine, methionine, phenylalanine, threonine, and valine content, and the total amino acids present include isoleucine, leucine, lysine, methionine, phenylalanine, threonine, valine, tyrosine, arginine, histidine, alanine, aspartic acid, glutamic acid, glycine, proline, serine, and hydroxyproline content.

(2) A prerequisite for label approval for products consisting of or containing "Mechanically Separated (Species)" is that such "Mechanically Separated (Species)" shall have been produced by an establishment under an approved plant quality control system. The Administrator shall receive, evaluate, and approve requests for plant quality control in accordance with § 318.4(d)(1) and (2) and (e) of this subchapter. Such a plant quality control system shall provide the controls and information necessary to assure that the product will meet the requirements described in § 319.5(a) and to enable establishment personnel and program employees to monitor the system for effectiveness. The system shall include a written description of the methods used by the establishment to maintain uniformity of the raw ingredients used in manufacturing product, to control the handling and processing of the raw ingredients and the finished product, and shall contain provisions for chemical analyses of the product and other procedures to determine and assure compliance with standards for the product. For purposes of this paragraph, a lot shall consist of the "Mechanically Separated (Species)" designated as such by the operator of the establishment or his or her agent from the product produced from a single species of livestock in no more than one continuous shift of up to 12 hours. All units of any lot must be available for inspection by program employees. Analysis of a sample of at least 1 pound from each lot to verify contents of fat, protein, and calcium in "Mechanically Separated (Species)" shall be performed by the operator of the establishment or his or her agent to assure that finished product will meet the requirements in § 319.5(a), except that such analyses with respect to fat, protein, and calcium content shall be required to be performed with respect to only one randomly selected lot of every five lots if the preceding ten analyses and all such analyses performed by the Department during the preceding ten analyses period establish compliance with the requirements of § 319.5(a), and that no analyses with respect to fat or protein content shall be required where the finished product is represented as product for processing. An analysis of a sample of at least 1 pound to verify essential amino acid content and/or

(§ 319.5(e)(2) continued)

protein efficiency ratio in "Mechanically Separated (Species)" shall be performed by the operator of the establishment or his or her agent at the rate of at least one per month during production to assure that finished product will meet the requirements of § 319.5(a), except that such analyses with respect to essential amino acid content and/or protein efficiency ratio shall be required to be performed only once every 6 months if the preceding three analyses and all such analyses performed by the Department during the preceding three analyses period establish compliance with the requirements of § 319.5(a). Finished product samples shall be analyzed in accordance with "Official Methods of Analysis of the Association of Official Analytical Chemists" (AOAC), 13th ed., 1980, sections 24.005 (page 376), 24.006-24.008 (page 376), 24.027 (page 379), and 43.212-43.216 (page 774-75) and the "2nd Supplement to the 13th Edition" (J.AOAC, Vol. 64, No. 2, 1981), section 24.B01-24.B03 (pages 509-10), which are incorporated by reference, or if no AOAC method is available, in accordance with the "Chemistry Laboratory Guidebook," U.S. Department of Agriculture, Washington, D.C., sections 6.009-6.009F (pages 6-31 through 6-34) and 6.010-6.010D (pages 6-35 through 6-41). Alternative methods of analysis may be submitted to the Administrator to determine their acceptability based upon their accuracy, repeatability, reproducibility, and lowest level of reliable measurement, as demonstrated by at least 3 laboratories. (Copies of the AOAC methods may be obtained from: AOAC, 1111 N. 19th Street, Arlington, VA 22209. Copies of the Chemistry Laboratory Guidebook may be obtained from: Superintendent of Documents, Government Printing Office, Washington, DC 20402. This incorporation by reference was approved by the Director of the Federal Register on December 30, 1981 and March 15, 1982. These materials are incorporated as they exist on the date of the approval. A notice of any change in the sections of the AOAC methods or the Chemistry Laboratory Guidebook cited herein will be published in the Federal Register.) The plant quality control system shall be subject to periodic review, and the approval of such system may be terminated in accordance with § 318.4(g)(2) of this subchapter.

§ 319.6 Limitations with respect to use of Mechanically Separated (Species)

(a) Meat food products required to be prepared from one species shall not contain Mechanically Separated (Species) of any other species.

(b) Mechanically Separated (Species) described in § 319.5 that has a protein content of not less than 14 percent and a fat content of not more than 30 percent may constitute up to 20 percent of the livestock and poultry product portion of any meat food product except those listed in paragraph (d) of this section.

(c) Mechanically Separated (Species) for processing described in § 319.5 may constitute up to 20 percent of the livestock and poultry product portion of any meat food product that is subject to a definition and standard of identity or composition in Part 319 which establishes a maximum limit on the fat content of such meat food product except those listed in paragraph (d) of this section.

(d) Mechanically Separated (Species) and Mechanically Separated (Species) for processing described in § 319.5 shall not be used in baby, junior, or toddler foods, ground beef, hamburger, fabricated steaks

(§ 319.6(d) continued)

(§ 319.15(a), (b), and (d)), barbecued meats (§ 319.80), roast beef-parboiled and steam roasted (§ 319.81), corned (cured) beef cuts (§§ 319.100-319.103), certain cured pork products (§§ 319.104(a)-(e) and 319.106), tripe with milk (§ 319.308), lima beans with ham and similar products (§ 319.310), beef with gravy and gravy with beef (§ 319.313), and meat pies (§ 319.500).

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(§ 381.76 continued)

(b) (1) There are two systems of post-mortem inspection: traditional inspection and modified traditional inspection. Modified traditional inspection shall be used only for young chickens¹ and in the following circumstances:

(i) if the operator requests it and the Administrator determines that the system will result in no loss of inspection efficiency; or

(ii) if the Administrator determines that modified traditional inspection will increase inspector efficiency.

(2) The requirements of paragraph (a) of this section are applicable to both traditional and modified traditional inspection.

(3) The following requirements are also applicable to modified traditional inspection:

(i) The facility must meet the requirements for modified traditional inspection in § 381.36(c).

(ii) The inspection stations shall consist of one outside carcass inspection station, at which one inspector inspects the outside of all birds and two inside carcass/viscera inspection stations at which each of two inspectors inspects the inside and viscera of half the birds processed. The outside carcass inspector shall be presented each bird with the breast side toward the inspector. The inside carcass/viscera inspector shall be presented each bird he is to inspect with the back side toward the inspector.

(iii) The maximum inspection rate for modified traditional inspection shall be 70 birds per minute per 3 inspector team.

¹/ The standards in §381.170(a) of the regulations (9 CFR 381.170(a)) specify which classes of chickens constitute young chickens.

§ 381.77 Carcasses held for further examination.

Each carcass, including all parts thereof, in which there is any lesion of disease, or other condition which might render such carcass or any part thereof adulterated and with respect to which a final decision cannot be made on first examination by the inspector, shall be held for further examination. The identity of each such carcass, including all parts thereof, shall be maintained until a final examination has been completed.

* § 381.78 Condemnation of carcasses and parts; separation of poultry suspected
* of containing biological residues. *

(a) At the time of any inspection under this subpart each carcass, or any part thereof, which is found to be adulterated shall be condemned, except that any such articles which may be made not adulterated by reprocessing, need not be so condemned if so reprocessed under the supervision of an inspector and thereafter found to be not adulterated.

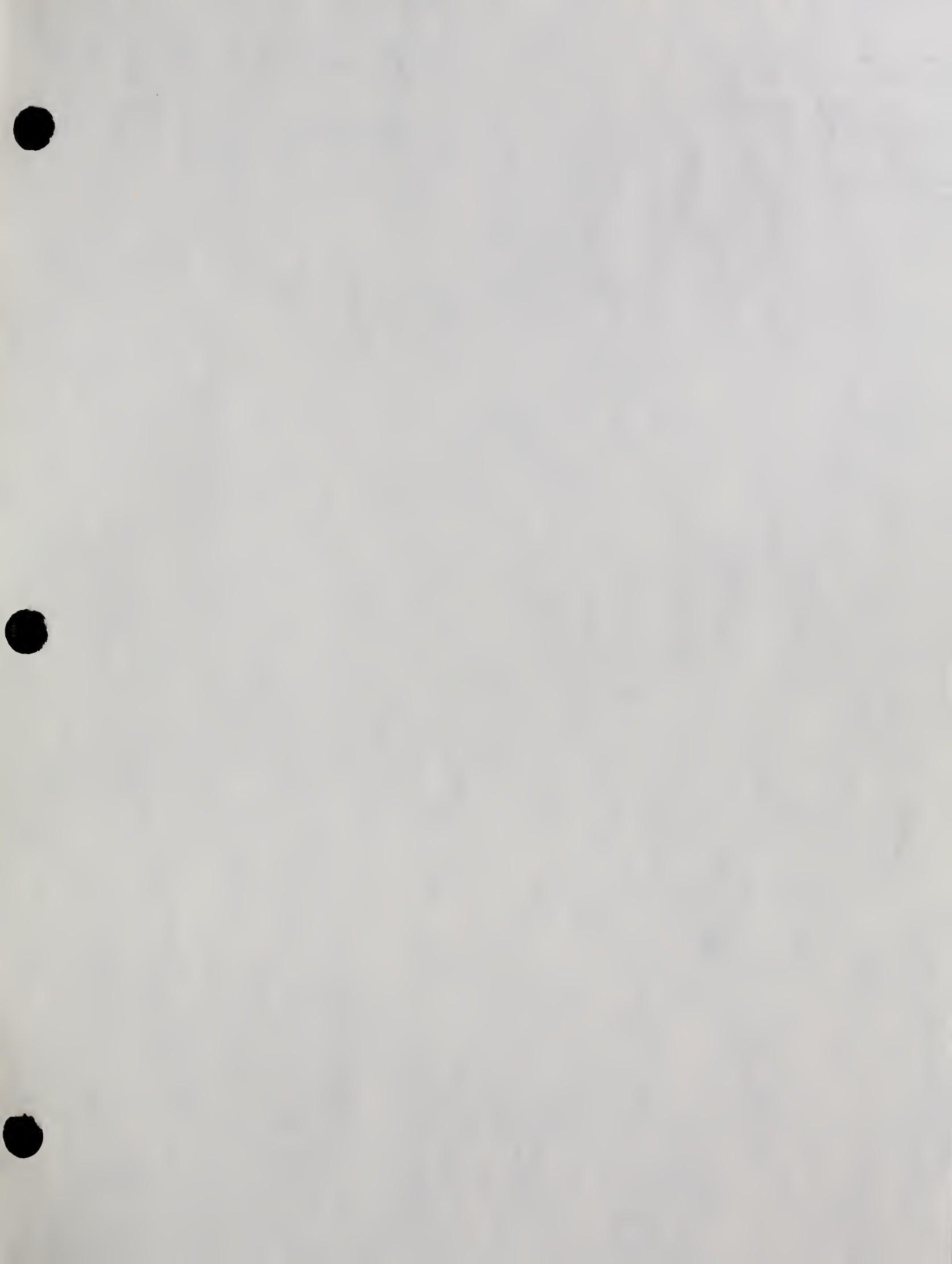
* (b) When a lot of poultry suspected of containing biological residues is
inspected in an official establishment, all carcasses and any parts of
* carcasses in such lot which are condemned shall be kept separate from all
other condemned carcasses or parts. *

§ 381.79 Passing of carcasses and parts.

Each carcass and all organs and other parts of carcasses which are found to be not adulterated shall be passed for human food.

§ 381.80 General; biological residues.

(a) The carcasses or parts of carcasses of all poultry inspected at an official establishment and found at the time of post-mortem inspection, or at any subsequent inspection, to be affected with any of the diseases or conditions named in other sections in this subpart, shall be disposed of in accordance with the section pertaining to the disease or condition. Owing to the fact that it is impracticable to formulate rules for each specific disease or conditions and to designate at just what stage a disease process results in an adulterated article, the decision as to the disposal of all carcasses, organs or other parts not specifically covered by the regulations, or by instructions of the Administrator issued pursuant thereto, shall be left to the inspector in



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